

ABSTRACT

This patent of invention reports the method for the preparation of 1,5-bis(4-hydroxy-3-methoxyphenyl)-penta-1,4-dien-3-one and derivatives with antitumoral properties: the sample denominated 37 compound was obtained with high yield and purity with ultrasonic technique presenting cytostatic activity (growth inhibition) in the concentrations evaluated and cytotoxic activity (cellular death) from the concentration of 0.25 mg/mL against nine different types of human cancer cell lines. This compound has a LD₅₀, equals to 8.54 g/Kg. That means this product can be considered itself as practically nontoxic. Doxorubicin, anticarcinogen medicine used as reference in all these tests, is a product extremely toxic (LD₅₀ of 20 mg/Kg) and it does not inhibit the growth of Mama NCI-ADR cell line (the one that expresses the phenotype of resistance against multiple drugs), therefore, our product presented a strong cytostatic activity. Other derivatives also presented a strong cytostatic activity, especially the one denominated EHB1 compound.